R E M A R K S

I. INTRODUCTION

In response to the Office Action Applicants have amended the title to be more clearly indicative of the invention to which the claims are directed. Applicants have also cancelled claims 67-70, and amended claims 62, 63, and 65, to recite a limitation whereby the processing method includes a step of dynamically partitioning the unified media data streams based on the elemental symbol width of the media data streams, with the elemental symbol width being equal to or narrower than the data path. Applicants respectfully submit that, based on the reasons that follow, amended claim 62, along with claims 63-66 dependent therefrom, are patentable over United States Patent No. 4,893,267 to Alsup et al. ("the '267 patent").

II. THE PRESENT INVENTION IS PATENTABLE OVER THE '267 PATENT BECAUSE THE '267 PATENT LACKS ANY DISCLOSURE OR SUGGESTION OF THE DYNAMIC PARTITIONING AND PARALLEL PROCESSING OF A PLURALITY OF DATA STREAMS, THE WIDTH OF EACH DATA STREAM BEING EQUAL TO OR NARROWER THAN THE DATA PATH, AS RECITED IN INDEPENDENT CLAIM 62

The Office Action rejects claims 62-70 under 35 U.S.C. § 103(a) as being unpatentable over the '267 patent.

Claim 62 claims a method for processing unified media data streams that includes a step of dynamically partitioning the unified media data streams based on the elemental symbol width of

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the media data streams, with the elemental symbol width being equal to or narrower than the data path The media data streams are dynamically partitioned for simultaneous parallel processing of each of the plurality of media data streams. The method of the present invention thereby performs parallel, multiple precision operations on a plurality of data streams, each of a width up to that of the data path.

The '267 patent discloses a data processor with an integer arithmetic unit, wherein the carry-in, carry-out, and overflow control logic are directly controlled by respective fields of the arithmetic instructions. The processor of the '267 patent _sequentially_ executes multi-precision arithmetic instructions on operands that are wider than the data path in multiple cycles. The '267 patent lacks any disclosure or teaching of the dynamic partitioning of a plurality of data streams concurrently transmitted over a single data path for _parallel processing_, as presently claimed.

The Office Action further asserts that,

> it would have been obvious to one of ordinary skill in the art at the time of invention to modify Alsup's system such that the media data is processed at substantially peak rate during the system operation because it would have allowed the system to process the media data at much higher rate based on the system requirements, thereby increasing the overall media data processing rate of the system and hence increase the overall performance of the system.

(Office Action, ¶ 21).

Applicants respectfully traverse this assertion because the "substantially peak operation" of the presently claimed media data processing method is achieved by the dynamic partitioning and parallel processing of the plurality of data streams concurrently transmitted over the data path. The processor operates at peak rates by performing parallel processing of multiple data streams utilizing the entire width of the data path. The '267 patent, however, simply provides an arithmetic unit that sequentially executes instructions in multiple cycles by utilizing carry-in, carry-out, and overflow logic that is controlled by fields in the instructions themselves. The '267 patent does not disclose or suggest a method for parallel processing that maximizes the full bandwidth of the data path by dynamically partitioning multiple data streams transmitted over the single data path, and therefore lacks any teaching or suggestion of "substantially peak operation," as presently claimed. Accordingly, Applicants submit that the presently claimed processing method would not have been obvious to one of ordinary skill in the art at the time of invention in view of the '267 processor.

Therefore, Applicants submit that claim 62 is patentable over the '267 patent. Additionally, Applicants submit that claims 63-66, being dependent from patentable base claim 62, are also patentable over the '267 patent.

Accordingly, Applicants respectfully request that the § 103(a) rejection of claims 62-66 be withdrawn.

III. **CONCLUSION**

Having completely responded to the Office Action, Applicants submit that all pending claims are in condition for allowance, an indication for which is respectfully solicited..

Respectfully submitted,

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